CLAIMS:

1.   A method of generating a maximum entropy speech model for a speech recognition system in which:

- by evaluating a training corpus, first probability values $p_{ind}(w \mid h)$ are formed for N-grams with $N \geq 0$;

5   - an estimate of second probability values $p_\lambda(w \mid h)$, which represent speech model values of the maximum entropy speech model, is made in dependence on the first probability values;

- boundary values m_α are determined which correspond to the equation

$$m_\alpha = \sum_{(h,w)} p_{ind}(w \mid h) \cdot N(h) \cdot f_\alpha(h,w)$$

where $N(h)$ is the rate of occurrence of the respective history h in the training corpus and $f_\alpha(h, w)$ is a filter function which has a value different from zero for specific N-grams predefined a priori and featured by the index α, and otherwise has the zero value;

15 - an iteration of speech model values of the maximum entropy speech model is continued to be made until values $m_\alpha^{(n)}$ determined in the nth iteration step according to the formula

$$m_\alpha^{(n)} = \sum_{(h,w)} p_\lambda^{(n)}(w \mid h) \cdot N(h) \cdot f_\alpha(h,w)$$

20   sufficiently accurately approach the boundary values m_α according to a predefinable convergence criterion.

2.   A method as claimed in claim 1, characterized in that for the iteration of the speech model values of the maximum entropy speech model, the GIS algorithm is

25 used.

3.   A method as claimed in claim 1 or 2, characterized in that a backing-off speech model is provided for producing the first probability values.

4.   A method as claimed in claim 1, characterized in that for calculating the

5   boundary values m_α for various sub-groups, which summarize groups of a specific α, various first probability values $p_{ind}(w \mid h)$ are used.

5.   A speech recognition system with a speech model generated as claimed in one of the claims 1 to 4.